product user guide

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Title	Issue	Date
Trench Sheet Extractor c/w Safety Chain	2	Aug. 2013

Contents

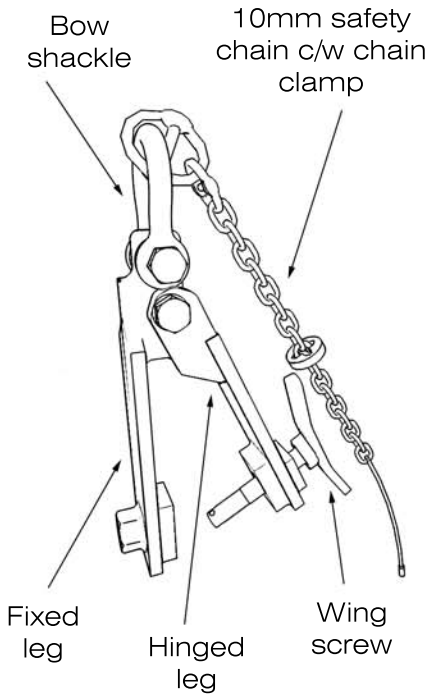
Page 1 : Introduction, Identification, Sizes, Weights and Safe Working Loads
Page 2 : Prior to Use Checks, Method of Operation, Important Checks, General
Appendix A : Provision of a Mabey Hire Site Demonstrator

1. Introduction

This booklet is intended to provide basic information for users of the Mabey Hire Trench Sheet Extractor c/w Safety Chain, and to draw the clients attention to the practical aspects of using this accessory. In particular the clients attention is drawn to the size and weight of the components and the need for planning the lifting operations involved. It is assumed that clients are familiar with general safe practices applicable to this type of work.
This booklet should be read in conjunction with the User Guide for Trench Sheeting and Light Piling.
Refer to Appendix A for details of our site demonstration service.

2. Identification, Sizes, Weights and Safe Working Loads

Mabey Hire have two types of Trench Sheet Extractor intended to be used as described below.



Code Number : T/S-EXT-SC

Used On : Mabey trench sheets up to 3.55mm thick i.e. M11 sheets up to 7m long.
S.W.L. : 5 Tonnes (50kN)
Pin Dia. : 7/8" (22.2mm)
Overall Length : 480mm approx.
Weight : 17 kg
Colour : Grey paint finish.
DO NOT USE A T/S-EXT-SC TO EXTRACT TRENCH SHEETS THICKER THAN 3.55mm.

Code Number : M8/M12-EXT-SC

Used On : Mabey trench sheets between 4 and 6mm thick i.e. M8, M12, M15, M17, Multilock and Multisheet up to 8m long.
S.W.L. : 7 Tonnes (70kN)
Pin Dia. : 1 1/8" (28.6mm)
Overall Length : 480mm approx.
Weight : 17 kg
Colour : Blue paint finish.

Each Extractor is complete with 1 no. safety chain and chain clamp.

Check that the Extractor and safety chain and chain clamp have been supplied with a current Report of Thorough Examination and check its expiry date.

The trench sheet extractors are designed soley for extracting trench sheets from excavations one at a time and should not be used for any other purpose.
The S.W.L. which is stamped on the body of the clamp and also referred to on the documentation supplied with the extractor indicates the maximum safe vertical pulling load that the extractor is intended to sustain as the trench sheets are extracted from the ground.
The extractor is not intended to be used for lifting purposes other than lowering a single sheet to the ground immediately after it has been extracted from the excavation.
Do not use the extractor clamp for pitching trench sheets.

3. Prior to use - Check trench sheets to be extracted for suitability for use with this clamp.

The safety chain cannot be fitted to M6 and M7 sheets as they only have 1 No. lifting hole.

The top lifting hole in the M11 trench sheets should be 25mm diameter and 40mm for all other sheets. The hole centre should not be less than 75mm from the top, and not more than 150mm. Ensure there is enough metal above the hole in the trench sheet to prevent the metal tearing under the load and it is not distorted to an extent that prevents the extractor clamping properly onto the sheet as described below.

The lower safety chain hole should be 40mm diameter. The hole centre should be between 240mm and 300mm from the top of the sheet.

4. Method of Operation

4.1. Before positioning the extractor it is necessary to unscrew and withdraw the wing screw.
4.2. Position the extractor vertically over the top of the trench sheet to be extracted with the fixed leg of the extractor on the excavation side of the trench sheet.
4.3. Align the hole on the fixed leg of the extractor with the top hole in the trench sheet and the hole in the hinged leg of the extractor.
4.4. Screw the wing screw fully in through the hinged leg, the trench sheet and the fixed leg. Tap the wing screw with a hammer to enure a tight fit.
4.5. Check that the threaded portion of the wing screw is protruding through the nut on the fixed leg of the extractor, and the clamp plates are tight against the trench sheet.
4.6. Insert the safety chain from the excavation side of the trench sheet through the lower hole in the trench sheet and secure with the chain clamp. Ensure the chain is slack and not twisted or knotted.
4.7. Using a suitable lifting appliance attached to the bow shackle on the trench sheet extractor, pull vertically to extract the trench sheet from the excavation. OPERATIVES MUST KEEP WELL CLEAR. Do not try to loosen the sheets by pulling the extractor sideways. Do not snatch or shock load the extractor.
4.8. Once the sheet has been extracted, lower the sheet to the ground. OPERATIVES MUST KEEP WELL CLEAR UNTIL THE SHEET IS FLAT ON THE GROUND.
4.9. Remove the chain clamp from the safety chain and pull the chain back through the hole in the trench sheet.
4.10. To release the trench sheet extractor once the sheet is flat on the ground, simply unscrew the wing screw fully and withdraw the extractor.

5. Important checks to be carried out during use

5.1. Before and regularly during use clean and examine the extractor for any faults or damage. In particular the extractor clamp must be kept free from dirt/debris at all times. Also, check the wing screw is not bent and that when fitted through the hole in the sheet it engages securely with the extractor body.
5.2. Regularly check the lifting hole in the sheets for signs of elongation. If this is noted, the extractor is being overloaded and an alternavtive method of extraction should be adopted.
5.3. Inspect the safety chain and chain clamp for damage. The chain should be in good order, free from any structural damage or permanent deformation of any kind. The chain clamp should also be free from any structural damage and its correct operation and safe function should be checked by depressing and releasing several times - any binding or hesitancy with its operation should result in it being changed for a new certified item. The chains coupler should be in good order showing no signs of damage or wear. Remember - if in doubt contact Mabey Hire.
5.4. After fitting to the trench sheet, ensure the safety chain is slack and does not take the weight of the trench sheet. The safety chain MUST NOT be used to lift the trench sheet.

THE EXTRACTOR MUST NOT BE MODIFIED/ALTERED AS THIS WILL INVALIDATE THE CERTIFICATION

6. General

Since our policy is one of continual improvement certain components may vary in decription from those given in this publication.

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User Information Appendix A : Provision of a Mabey Hire Site Demonstrator

Mabey Hire can, subject to availability, offer the services of a Site Demonstrator.
However, the Customer should note the following :-

A1. The Customers Responsibilities

A safe system of work remains the Customers responsibility at all times. It is his responsibility to prepare for, organise and direct the operation including :-

A1.1 Site induction for the demonstrator.

A1.2 Preparation of a method statement.

A1.3 A risk assessment.

A1.4 Selection of lifting equipment and any other equipment required to undertake the work.

A1.5 Positioning of the crane or lifting appliance.

A1.6 Banking the crane.

A1.7 Slinging the components.

A1.8 Assembling the components and installing them.

A2. Activities which the Mabey Hire Demonstrator is authorised to carry out

Mabey Hire Demonstrator is authorised to :-

A2.1 Assist in indentification of Mabey Hire components.

A2.2 Explain how they fasten together.

A2.3 Point out slinging points and special methods of lifting as noted in the user information.

A2.4 Demonstrate how to attach hoses and use pumps to extend/retract hydraulic braces.

A2.5 Draw attention to the content of the user information.

A2.6 Clarify queries with Mabey Hire scheme drawings.

The Demonstrator is NOT AUTHORISED to 'take over' or direct the installation.

To : Mabey Hire Limited
[Address]

Tel.No._____ Fax No._____

From _____

Site _____

Tel.No._____ **Fax No.** _____

Provision of a Mabey Hire Demonstrator on site

We confirm receipt of your User Information Appendix A and that we would like to request the services of your Demonstrator on _____ date(s).

Signed _____ Name _____ Date